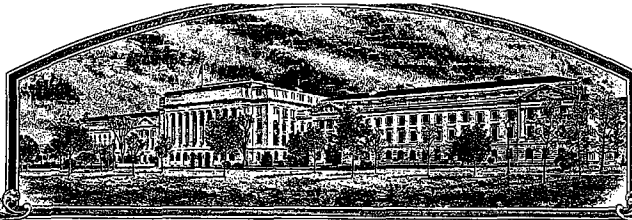


No.

9800355



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'PHIB5'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of September, in the year two thousand one.

Attest:

Paul M. Jacobson

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER		3. VARIETY NAME	
Pioneer Hi-Bred International, Inc.				PH1B5	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)		5. TELEPHONE (include area code)		FOR OFFICIAL USE ONLY PVPO NUMBER 9800355	
Research and Product Development P.O. Box 85 Johnston, IA 50131-0085		515/270-4051			
6. FAX (include area code)		7. GENUS AND SPECIES NAME		FILING DATE	
515/253-2125		Zea Mays		08/10/1998	
8. FAMILY NAME (Botanical)		9. CROP KIND NAME (Common name)		FILING AND EXAMINATION FEE:	
JRM 9/12/00 Gramineae		Corn		\$ 2450.00	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)		11. IF INCORPORATED, GIVE STATE OF INCORPORATION		DATE 08/05/1998	
Corporation		Iowa		CERTIFICATION FEE:	
12. DATE OF INCORPORATION		13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS		\$ 320.00	
May 6, 1926		Steven R. Anderson Research and Product Development P.O. Box 85 Johnston, IA 50131-0085		DATE 9/10/2001	
14. TELEPHONE (include area code)		15. FAX (include area code)			
515/270-4051		515/253-2125			
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)					
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,600 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)					
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)					
<input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)					
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?		
<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?					
<input checked="" type="checkbox"/> YES (If "yes," give names of countries and dates) United States, November 1, 1997 <input type="checkbox"/> NO					
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.					
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.					
Applicant(s) is(are) informed that false representation herein can jeopardize protection and results in penalties.					
SIGNATURE OF APPLICANT (Owner(s))		SIGNATURE OF APPLICANT (Owner(s))			
		Steven R. Anderson			
NAME (Please print or type)		NAME (Please print or type)			
		Steven R. Anderson			
CAPACITY OR TITLE		CAPACITY OR TITLE		DATE	
		Senior Research Associate		10/12/98	

GENERAL: To be effectively filed with the Plant Variety protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in a approved public repository; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (*See Section 97.6 of the Regulations and Rules of Practice.*) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety production Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: (301) 504-5518

9800355

ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
- (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
- (3) submit, if helpful, seed and plant specimens of photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(5) of the Act required applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
17. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant may **NOT** reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See Regulations and Rules of Practice, Section 97.103*).
20. See sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.*)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate of any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-2791. To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

Exhibit A. Origin and Breeding History

Pedigree: PHJ90/PHKW3)MXB72111X

Pioneer Line PH1B5, Zea mays L., a dent corn inbred, was developed by Pioneer Hi-Bred International, Inc. from the single cross PHJ90 (Certificate No. 9100093) X PHKW3 (Certificate No. 9500209) using the pedigree method of breeding. The progenitors of PH1B5 are proprietary inbred lines of Pioneer Hi-Bred International, Inc. Selfing and selection were practiced within the above F1 cross for 6 generations in the development of PH1B5 at York, Nebraska. During line development, crosses were made to inbred testers for the purpose of estimating the line's combining ability. Yield trials were grown at York, Nebraska, as well as other Pioneer research locations. After initial testing, additional hybrid combinations have been evaluated and subsequent generations of the line have been grown and hand-pollinated with observations made for uniformity.

PH1B5 has shown uniformity and stability for all traits as described in Exhibit C - "Objective Description of Variety". It has been self-pollinated and ear-rowed a sufficient number of generations with careful attention paid to uniformity of plant type to assure genetic homozygosity and phenotypic stability. The line has been increased both by hand and in isolated fields with continued observations for uniformity.

No variant traits have been observed or are expected in PH1B5.

The criteria used in the selection of PH1B5 were brittle snap resistance, Northern Leaf Blight resistance, ear mold resistance, yield, both per se and in hybrid combinations; kernel size, especially important in production; ability to germinate in adverse conditions; number of tillers, especially important in production because having numerous tillers increases hybrid production costs spent on detasseling; disease and insect resistance; pollen yield; and tassel size.

The line PH1B5 has been increased both by hand and in isolated fields with continued observations for uniformity and stability throughout development, and for 3 generations during the final stages of inbred development and seed multiplication.

JMS
8/14/01

DEVELOPMENTAL HISTORY FOR PH1B5

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<u>Season/Year</u>	<u>Inbreeding Level</u>
Summer 1991	F0 Bulk
Winter 1991	F1 Bulk
Summer 1992	F2# Bulk
Summer 1993	F3#*
Winter 1993	F4#*
Summer 1994	F5#*
Winter 1994	F6#*
Summer 1995	F7#*
Winter 1995	F8 Bulk Increase

#PH1B5 was selfed and selected through F7 generation.

*PH1B5 was selfed and ear-rowed from F3 through F7 generation.

Exhibit B. Novelty Statement

PH1B5 most closely resembles the Pioneer Hi-Bred International, Inc. proprietary inbred line PHKW3 (PVP Certificate No. 9500209). The data in Table 1A and 1B are from paired comparisons collected primarily from two environments in Johnston, IA. The data in Table 2 are from paired comparisons at multiple locations grown primarily in the adapted growing area of PH1B5. The traits in Table 1A, 1B, and Table 2 collectively show measurable differences between the two varieties. Variety PH1B5 has a shorter husk extension length (4.3 vs 9.5 cm) than PHKW3. Variety PH1B5 has a shorter husk length (21.4 vs 25.6 cm) than PHKW3. Variety PH1B5 has a longer leaf length (84.8 cm vs 78.6 cm) than PHKW3. Variety PH1B5 has a smaller tassel branch angle (19.0 vs 33.5 degrees) than PHKW3. Variety PH1B5 has a shorter tassel length (53.7 vs 65.3 cm) than PHKW3. Variety PH1B5 has a shorter tassel peduncle length (16.7 vs 24.2 cm) than PHKW3. Variety PH1B5 has lower Gray Leaf Spot tolerance (score = 2.7 vs 4.4) than PHKW3. Variety PH1B5 has lower Stewart's Wilt tolerance (score = 6.2 vs 3.5) than PHKW3.

For table 1A and 1B a paired t-test was used and the appropriate parameters are given. For Table 2 a paired comparison was used. These types of comparisons are common in agricultural experiments and should satisfy the criteria and assumptions satisfactorily.

5MS
8/14/01

Exhibit B Novelty Statement Tables

Table 1A. These data indicate differences between varieties PH1B5 and PHKW3. Data are from multiple environments. A t-test was used to compare differences between means. Data is broken out by environments in 1997.

station	loc	year	trait	variety-1	variety-2	Count	Count	Mean-1	Mean-2	Mean Diff	StdDeviation-1	StdDeviation-2	StdErr or-1	StdErr or-2	DF Pooled	t-Value Pooled	Prob_(2-tail) Pooled
AD	20N	1997	husk extension length (cm)	PH1B5	PHKW3	5	5	4.8	9.4	-4.6	0.837	0.894	0.374	0.400	8	-8.40	0.000
JH	21	1997	husk extension length (cm)	PH1B5	PHKW3	5	5	3.8	9.6	-5.8	1.304	2.074	0.583	0.927	8	-5.29	0.001
AD	20N	1997	husk length (cm)	PH1B5	PHKW3	5	5	21.8	25.8	-4.0	1.483	0.837	0.663	0.374	8	-5.25	0.001
JH	21	1997	husk length (cm)	PH1B5	PHKW3	5	5	21.0	25.4	-4.4	0.707	1.140	0.316	0.510	8	-7.33	0.000
AD	20N	1997	leaf length (cm)	PH1B5	PHKW3	5	5	85.8	81.8	4.0	1.643	2.775	0.735	1.241	8	2.77	0.024
JH	21	1997	leaf length (cm)	PH1B5	PHKW3	5	5	83.8	75.4	8.4	2.588	5.128	1.158	2.293	8	3.27	0.011
AD	20N	1997	tassel branch angle (degrees)	PH1B5	PHKW3	5	5	18.0	40.0	-22.0	5.701	11.180	2.550	5.000	8	-3.92	0.004
JH	21	1997	tassel branch angle (degrees)	PH1B5	PHKW3	5	5	20.0	27.0	-7.0	0.000	4.472	0.000	2.000	8	-3.50	0.008
AD	20N	1997	tassel length (cm)	PH1B5	PHKW3	5	5	54.2	61.0	-6.8	3.194	1.581	1.428	0.707	8	-4.27	0.003
JH	21	1997	tassel length (cm)	PH1B5	PHKW3	5	5	53.2	69.6	-16.4	1.304	4.561	0.583	2.040	8	-7.73	0.000
AD	20N	1997	tassel peduncle length (cm)	PH1B5	PHKW3	5	5	17.2	23.2	-6.0	1.095	1.924	0.490	0.860	8	-6.06	0.000
JH	21	1997	tassel peduncle length (cm)	PH1B5	PHKW3	5	5	16.2	25.2	-9.0	0.837	2.490	0.374	1.114	8	-7.66	0.000

Table 1B. Summary data pooled across environments in 1997.

year	Trait	variety-1	variety-2	Count -1	Count -2	Mean- 1	Mean- 2	Mean Diff	StdDev ation-1	StdDev ation-2	StdErr or-1	StdErr or-2	DF Pooled	t- Value Pooled	Prob_(2 -tail) Pooled
1997	husk extension length (cm)	PH1B5	PHKW3	10	10	4.3	9.5	-5.2	1.160	1.509	0.367	0.477	18	-8.64	0.000
1997	husk length (cm)	PH1B5	PHKW3	10	10	21.4	25.6	-4.2	1.174	0.966	0.371	0.306	18	-8.74	0.000
1997	leaf length (cm)	PH1B5	PHKW3	10	10	84.8	78.6	6.2	2.300	5.147	0.727	1.628	18	3.48	0.003
1997	tassel branch angle (degrees)	PH1B5	PHKW3	10	10	19.0	33.5	-14.5	3.944	10.554	1.247	3.337	18	-4.07	0.001
1997	tassel length (cm)	PH1B5	PHKW3	10	10	53.7	65.3	-11.6	2.359	5.559	0.746	1.758	18	-6.07	0.000
1997	tassel peduncle length (cm)	PH1B5	PHKW3	10	10	16.7	24.2	-7.5	1.059	2.348	0.335	0.742	18	-9.21	0.000

Exhibit B Novelty Statement Tables

Table 2. These data indicate differences between varieties PH1B5 and PHKW3. Data are from multiple locations and years grown primarily in the adapted growing area. Values are for Gray Leaf Spot score and Stewart's Wilt score.

Variety 1 = PH1B5
Variety 2 = PHKW3

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		GLF	STW
	VAR	SPT	WLT
YEAR	#	ABS	ABS
95	1	2.0	5.5
	2	4.0	3.5
	LOCS	1	2
	REPS	1	2
	PROB		.000#
96	1	2.6	
	2	4.4	
	LOCS	7	
	REPS	12	
	PROB	.032+	
97	1	4.0	7.5
	2	5.0	3.5
	LOCS	1	1
	REPS	1	4
	PROB		
TOTAL SUM	1	2.7	6.2
	2	4.4	3.5
	LOCS	9	3
	REPS	14	6
	DIFF	1.8	2.7
	PROB	.009#	.057*


United States Department of Agriculture, Agricultural Marketing Service
 Science Division, Plant Variety Protection Office
 National Agricultural Library Building, Room 500
 Beltsville, MD 20705

Objective Description of Variety
 Corn (Zea mays L.)

Name of Applicant (s) Pioneer Hi-Bred International, Inc.	Variety Seed Source	Variety Name or Temporary Designation PH1B5
Address (Street & No., or RFD No., City, State, ZipCode and Country) 7301 NW 62nd Avenue, P.O. Box 85, Johnston, Iowa 50131-0085		FOR OFFICIAL USE PVP0 Number
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by an '*' are considered necessary for an adequate variety description and must be completed.		
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices: describe #25 and #26 in Comments section):		
01=Light Green 02=Medium Green 03=Dark Green 04=Very Dark Green 05=Green-Yellow	06=Pale Yellow 07=Yellow 08=Yellow Orange 09=Salmon 10=Pink-Orange	11=Pink 12=Light Red 13=Cherry Red 14=Red 15=Red & White 16=Pale Purple 17=Purple 18=Colorless 19=White 20=White Capped 21=Buff 22=Tan 23=Brown 24=Bronze 25=Variegated (Describe) 26=Other (Describe)
STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data): Yellow Dent Families: Family Members B14 CM105, A632, B64, B68 B37 B37, B76, H84 B73 N192, A679, B73, NC268 C103 Mo17, Va102, Va35, A682 Oh43 A619, MS71, H99, Va26 WF9 W64A, A554, A654, Pa91 Yellow Dent (Unrelated): Co109, ND246, Oh7, T232, W117, W153R, W18BN White Dent: C166, H105, Ky228 Sweet Corn: C13, Iowa5125, P39, 2132 Popcorn: SG1533, 4722, HP301, HP7211 Pipecorn: Mo15W, Mo16W, Mo24W		

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EXHIBIT C: PH1B5

1. TYPE: (describe intermediate types in Comments section):			Standard Variety Name		
2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental			MO17		
2. REGION WHERE DEVELOPED IN THE U.S.A.:			Standard Seed Source		
 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other			PI 558532		
3. MATURITY (In Region of Best Adaptability; show Heat Unit formula in 'Comments' section)			DAYS HEAT UNITS		
DAYS HEAT UNITS			DAYS HEAT UNITS		
072	1,298.8	From emergence to 50% of plants in silk	077	1,401.0	
072	1,296.8	From emergence to 50% of plants in pollen	076	1,382.3	
005	0,116.3	From 10% to 90% pollen shed	004	0,088.5	
		From 50% silk to optimum edible quality			
067	1,241.5	From 50% silk to harvest at 25% moisture	069	1,215.5	
4. PLANT:			Standard Sample		
		Standard Deviation	Sample Size	Standard Deviation	Sample Size
205.3	cm Plant Height (to tassel tip)	03.40	04	223.3	14.22 04
076.5	cm Ear Height (to base of top ear node)	04.73	04	095.5	15.59 04
015.1	cm Length of Top Ear Internode	01.81	04	017.1	01.42 04
0.0	Average Number of Tillers	00.03	04	0.0	00.01 04
1.0	Average Number of Ears per Stalk	00.00	04	1.0	00.00 04
4	Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark			1	
5. LEAF:			Standard Sample		
		Standard Deviation	Sample Size	Standard Deviation	Sample Size
09.4	cm Width of Ear Node Leaf	00.38	04	09.0	01.04 03
83.2	cm Length of Ear Node Leaf	02.60	04	76.2	11.91 03
06	Number of leaves above top ear	00.50	04	06	00.95 04
41	Degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	14.07	04	40	11.27 04
03	Leaf Color (Munsell code)	5GY34		03	5GY34
1	Leaf Sheath Pubescence (Rate on scale from 1=none to 9=like peach fuzz)			1	
7	Marginal Waves (Rate on scale from 1=none to 9=many)			6	
7	Longitudinal Creases (Rate on scale from 1=none to 9=many)			7	
6. TASSEL:			Standard Sample		
		Standard Deviation	Sample Size	Standard Deviation	Sample Size
07	Number of Primary Lateral Branches	00.38	04	07	00.91 04
25	Branch Angle from Central Spike	13.20	04	36	08.04 04
55.5	cm Tassel Length (from top leaf collar to tassel tip)	02.22	04	64.1	02.35 04
8	Pollen Shed (rate on scale from 0=male sterile to 9=heavy shed)			7	
07	Anther Color (Munsell code)	5Y8.58		01	2.5GY88
01	Glume Color (Munsell code)	5GY56		01	5GY58
1	Bar Glumes (Glume Bands): 1=Absent 2=Present			1	
Application Variety Data			Standard Variety Data		

7a. EAR (Unhusked Data):

<u>11</u> Silk Color (3 days after emergence) (Munsell code)	<u>10R76</u>	<u>01</u> <u>2.5GY86</u>
<u>02</u> Fresh Husk Color (25 days after 50% silking) (Munsell code)	<u>5GY68</u>	<u>02</u> <u>5GY68</u>
<u>21</u> Dry Husk Color (65 days after 50% silking) (Munsell code)	<u>2.5Y8.54</u>	<u>21</u> <u>2.5Y8.54</u>
<u>1</u> Position of Ear at Dry Husk Stage: 1= Upright 2= Horizontal 3= Pendant		<u>2</u>
<u>7</u> Husk Tightness (Rate of Scale from 1=very loose to 9=very tight)		<u>5</u>
<u>2</u> Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)		<u>2</u>

7b. EAR (Husked Ear Data):

	Standard Deviation	Sample Size	Standard Deviation	Sample Size
<u>14.5</u> cm Ear Length	<u>01.29</u>	<u>04</u>	<u>18.3</u> <u>01.50</u>	<u>04</u>
<u>44.8</u> mm Ear Diameter at mid-point	<u>01.50</u>	<u>04</u>	<u>36.8</u> <u>00.96</u>	<u>04</u>
<u>128.5</u> gm Ear Weight	<u>15.15</u>	<u>04</u>	<u>102.8</u> <u>03.50</u>	<u>04</u>
<u>17</u> Number of Kernel Rows	<u>00.96</u>	<u>04</u>	<u>11.0</u> <u>00.00</u>	<u>04</u>
<u>2</u> Kernel Rows: 1=Indistinct 2=Distinct			<u>2</u>	
<u>1</u> Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			<u>1</u>	
<u>11.5</u> cm Shank Length	<u>02.08</u>	<u>04</u>	<u>11.0</u> <u>00.82</u>	<u>04</u>
<u>2</u> Ear Taper: 1=Slight 2= Average 3=Extreme			<u>1</u>	

8. KERNEL (Dried)

	Standard Deviation	Sample Size	Standard Deviation	Sample Size
<u>11.5</u> mm Kernel Length	<u>00.58</u>	<u>04</u>	<u>11.0</u> <u>00.00</u>	<u>04</u>
<u>08.0</u> mm Kernel Width	<u>00.00</u>	<u>04</u>	<u>08.8</u> <u>00.50</u>	<u>04</u>
<u>04.0</u> mm Kernel Thickness	<u>00.00</u>	<u>04</u>	<u>04.5</u> <u>00.58</u>	<u>04</u>
<u>08.0</u> % Round Kernels (Shape Grade)	<u>00.82</u>	<u>04</u>	<u>32.0</u> <u>09.00</u>	<u>03</u>
<u>1</u> Aleurone Color Pattern: 1-Homozygous 2=Segregating			<u>1</u>	
<u>07</u> Aleurone Color (Munsell code)	<u>1.25Y714</u>		<u>07</u> <u>10YR814</u>	
<u>07</u> Hard Endosperm Color (Munsell code)	<u>1.25Y714</u>		<u>07</u> <u>10YR714</u>	
<u>03</u> Endosperm Type: 1=Sweet (Su1) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other_____			<u>3</u>	
<u>25.3</u> gm Weight per 100 Kernels (unsized sample)	<u>00.96</u>	<u>04</u>	<u>30.50</u> <u>03.11</u>	<u>04</u>

9. COB:

	Standard Deviation	Sample Size	Standard Deviation	Sample Size
<u>25.5</u> mm Cob Diameter at mid-point	<u>00.58</u>	<u>04</u>	<u>19.0</u> <u>00.82</u>	<u>04</u>
<u>14</u> Cob Color (Munsell code)	<u>10R46</u>		<u>14</u> <u>2.5YR56</u>	

10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant);
leave blank if not tested; leave Race or Strain Options blank if polygenic):

A. Leaf Blights, Wilts, and Local Infection Diseases

Anthraxnose Leaf Blight (*Colletotrichum graminicola*)
Common Rust (*Puccinia sorghi*)
Common Smut (*Ustilago maydis*)
Eyespot (*Kabatiella zeae*)
Goss's Wilt (*Clavibacter michiganense* spp. *nebraskense*)
Gray Leaf Spot (*Cercospora zeae-maydis*)
Helminthosporium Leaf Spot (*Bipolaris zeicola*) Race _____
Northern Leaf Blight (*Exserohilum turcicum*) Race _____
Southern Leaf Blight (*Bipolaris maydis*) Race _____
Southern Rust (*Puccinia polysora*)
Stewart's Wilt (*Erwinia stewartii*)
Other (Specify) _____

B. Systemic Diseases

Corn Lethal Necrosis (MCMV and MDMV)
Head Smut (*Sphacelotheca reiliana*)
Maize Chlorotic Dwarf Virus (MDV)
Maize Chlorotic Mottle Virus (MCMV)
Maize Dwarf Mosaic Virus (MDMV)
Sorghum Downy Mildew of Corn (*Peronosclerospora sorghi*)
Other (Specify) _____

C. Stalk Rots

Anthraxnose Stalk Rot (*Colletotrichum graminicola*)
Diplodia Stalk Rot (*Stenocarpella maydis*)
Fusarium Stalk Rot (*Fusarium moniliforme*)
Gibberella Stalk Rot (*Gibberella zeae*)
Other (Specify) _____

D. Ear and Kernel Rots

Aspergillus Ear and Kernel Rot (*Aspergillus flavus*)
Diplodia Ear Rot (*Stenocarpella maydis*)
Fusarium Ear and Kernel Rot (*Fusarium moniliforme*)
Gibberella Ear Rot (*Gibberella zeae*)
Other (Specify) _____

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11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); (leave blank if not tested) :

Banks grass Mite (*Oligonychus pratensis*)
 Corn Worm (*Helicoverpa zea*)
 Leaf Feeding
 Silk Feeding
 mg larval wt.
 Ear Damage
 Corn Leaf Aphid (*Rhopalosiphum maidis*)
 Corn Sap Beetle (*Carpophilus dimidiatus*)
 European Corn Borer (*Ostrinia nubilalis*)
 1st Generation (Typically Whorl Leaf Feeding)
 2nd Generation (Typically Leaf Sheath-Collar Feeding)
 Stalk Tunneling
 cm tunneled/plant
 Fall Armyworm (*Spodoptera frugiperda*)
 Leaf Feeding
 Silk Feeding
 mg larval wt.
 Maize Weevil (*Sitophilus zeamais*)
 Northern Rootworm (*Diabrotica barberi*)
 Southern Rootworm (*Diabrotica undecimpunctata*)
 Southwestern Corn Borer (*Diatraea grandiosella*)
 Leaf Feeding
 Stalk Tunneling
 cm tunneled/plant
 Two-spotted Spider Mite (*Tetranychus urticae*)
 Western Rootworm (*Diabrotica virgifera virgifera*)
 Other (Specify) _____

12. AGRONOMIC TRAITS:

Staygreen (at 65 days after anthesis) (Rate
 on a scale from 1=worst to excellent)
 % Dropped Ears (at 65 days after anthesis)
 % Pre-anthesis Brittle Snapping
 % Pre-anthesis Root Lodging
 Post-anthesis Root Lodging (at 65 days after anthesis)
 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)

13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied):

1 Isozymes

0 RFLP's

0 RAPD's

COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):

Application Variety Data
 Data

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Standard Variety

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CLARIFICATION OF DATA IN EXHIBITS B AND C

Please note the data presented in Exhibit C, "Objective Description of Variety," are collected primarily at two environments in Johnston, Iowa. The data in Exhibit B are from comparisons of inbreds grown in the same tests in the adapted growing area of PH1B5 and from two environments in Johnston, IA.

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The data collected in exhibit C were collected in 1996 and 1997 for page 1 and 2. There are environmental factors that differ from environment to environment. The environments had different planting dates. Environmental temperature and precipitation differences during the vegetative and grain fill periods can impact plant and grain traits and be a source of variability. These data are based on 5 plants measured at each location. The variation between traits collected in different years is usually higher than variation between locations in a given year or within locations. Please see Table 3 for average temperature and rainfall information in 1996 and 1997.

Table 3. Temperature and Rainfall**TEMPERATURE**

YEAR	MAY	JUN	JULY	AUG	AVERAGE
1994	59.8	70.7	71.9	69.0	67.9
1995	56.2	69.4	74.3	76.9	69.2
1996	56.2	69.3	71.3	70.5	66.8
1997	53.5	70.6	74.1	69.6	67.0
1998	64.7	66.6	74.8	73.5	69.9
1999	60.7	69.7	78.7	70.5	69.9

RAINFALL

YEAR	MAY	JUN	JULY	AUG	Total
1994	3.67	5.75	1.71	4.18	15.31
1995	5.04	4.19	2.94	2.87	15.04
1996	8.47	4.35	2.51	2.14	17.47
1997	4.32	3.27	4.10	1.36	13.05
1998	6.46	11.07	5.70	4.96	28.19
1999	6.46	4.54	4.45	6.55	21.85

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DEFINITIONS

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In the description and examples, a number of terms are used herein. In order to provide a clear and consistent understanding of the specification and claims, including the scope to be given such terms, the following definitions are provided:

ANT ROT	=	ANTHRACNOSE STALK ROT (<i>Colletotrichum graminicola</i>). A 1 to 9 visual rating indicating the resistance to Anthracnose Stalk Rot. A higher score indicates a higher resistance.
BAR PLT	=	BARREN PLANTS. The percent of plants per plot that were not barren (lack ears).
BRT STK	=	BRITTLE STALKS. This is a measure of the stalk breakage near the time of pollination, and is an indication of whether a hybrid or inbred would snap or break near the time of flowering under severe winds. Data are presented as percentage of plants that did not snap.
BU ACR	=	YIELD (BUSHEL/ACRE). Yield of the grain at harvest in bushels per acre adjusted to 15.5% moisture.
CLD TST	=	COLD TEST. The percent of plants that germinate under cold test conditions.
CLN	=	CORN LETHAL NECROSIS. Synergistic interaction of maize chlorotic mottle virus (MCMV) in combination with either maize dwarf mosaic virus (MDMV-A or MDMV-B) or wheat streak mosaic virus (WSMV). A 1 to 9 visual rating indicating the resistance to Corn Lethal Necrosis. A higher score indicates a higher resistance.
COM RST	=	COMMON RUST (<i>Puccinia sorghi</i>). A 1 to 9 visual rating indicating the resistance to Common Rust. A higher score indicates a higher resistance.
DIP ERS	=	DIPLODIA EAR MOLD SCORES (<i>Diplodia maydis</i> and <i>Diplodia macrospora</i>). A 1 to 9 visual rating indicating the resistance to Diplodia Ear Mold. A higher score indicates a higher resistance.
DRP EAR	=	DROPPED EARS. A measure of the number of dropped ears per plot and represents the percentage of plants that did not drop ears prior to harvest.
EAR HT	=	EAR HEIGHT. The ear height is a measure from the ground to the highest placed developed ear node attachment and is measured in cm.
EAR MLD	=	GENERAL EAR MOLD. Visual rating (1-9 score) where a "1" is very susceptible and a "9" is very resistant. This is based on overall rating for ear mold of mature ears without determining the specific mold organism, and may not be predictive for a specific ear mold.
EAR SZ	=	EAR SIZE. A 1 to 9 visual rating of ear size. The higher the rating the larger the ear size.
ECB 1LF	=	EUROPEAN CORN BORER FIRST GENERATION LEAF FEEDING (<i>Ostrinia nubilalis</i>). A 1 to 9 visual rating indicating the resistance to preflowering leaf feeding by first generation European Corn Borer. A higher score indicates a higher resistance.

- ECB 2IT** = **EUROPEAN CORN BORER SECOND GENERATION INCHES OF TUNNELING** (*Ostrinia nubilalis*).
Average inches of tunneling per plant in the stalk.
- ECB 2SC** = **EUROPEAN CORN BORER SECOND GENERATION** (*Ostrinia nubilalis*).
A 1 to 9 visual rating indicating post flowering degree of stalk breakage and other evidence of feeding by European Corn Borer, Second Generation. A higher score indicates a higher resistance.
- ECB DPE** = **EUROPEAN CORN BORER DROPPED EARS** (*Ostrinia nubilalis*).
Dropped ears due to European Corn Borer. Percentage of plants that did not drop ears under second generation corn borer infestation.
- EST CNT** = **EARLY STAND COUNT**.
This is a measure of the stand establishment in the spring and represents the number of plants that emerge on per plot basis for the inbred or hybrid.
- EYE SPT** = **EYE SPOT** (*Kabatiella zeae* or *Aureobasidium zeae*).
A 1 to 9 visual rating indicating the resistance to Eye Spot. A higher score indicates a higher resistance.
- FUS ERS** = **FUSARIUM EAR ROT SCORE**. (*Fusarium moniliforme* or *Fusarium subglutinans*).
A 1 to 9 visual rating indicating the resistance to Fusarium ear rot. A higher score indicates a higher resistance.
- GDU** = **GROWING DEGREE UNITS**.
Using the Barger Heat Unit Theory, which assumes that maize growth occurs in the temperature range 50°F - 86°F and that temperatures outside this range slow down growth; the maximum daily heat unit accumulation is 36 and the minimum daily heat unit accumulation is 0. The seasonal accumulation of GDU is a major factor in determining maturity zones.
- GDU SHD** = **GDU TO SHED**.
The number of growing degree units (GDUs) or heat units required for an inbred line or hybrid to have approximately 50 percent of the plants shedding pollen and is measured from the time of planting. Growing degree units are calculated by the Barger Method, where the heat units for a 24-hour period are:
$$\text{GDU} = (\text{Max. Temp.} + \text{Min. temp.}) - 50/2$$

The highest maximum temperature used is 86° F. and the lowest minimum temperature used is 50°F. For each inbred or hybrid it takes a certain number of GDUs to reach various stages of plant development.
- GDU SLK** = **GDU TO SILK**.
The number of growing degree units required for an inbred line or hybrid to have approximately 50 percent of the plants with silk emergence from time of planting. Growing degree units are calculated by the Barger Method as given in GDU SHD definition.
- GIBERS** = **GIBBERELLA EAR ROT (PINK MOLD)** (*Gibberella zeae*).
A 1 to 9 visual rating indicating the resistance to Gibberella Ear Rot. A higher score indicates a higher resistance.
- GLF SPT** = **GRAY LEAF SPOT** (*Cercospora zeae-maydis*).
A 1 to 9 visual rating indicating the resistance to Gray Leaf Spot. A higher score indicates a higher resistance.
- GOS WLT** = **GOSS' WILT** (*Corynebacterium nebraskense*).
A 1 to 9 visual rating indicating the resistance to Goss' Wilt. A higher score indicates a higher resistance.

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- GRN APP** = **GRAIN APPEARANCE.**
This is a 1 to 9 rating for the general appearance of the shelled grain as it is harvested based on such factors as the color of harvested grain, any mold on the grain, and any cracked grain. High scores indicate good grain quality.
- HC BLT** = **HELMINTHOSPORIUM CARBONUM LEAF BLIGHT**
(*Helminthosporium carbonum*).
A 1 to 9 visual rating indicating the resistance to Helminthosporium infection.
A higher score indicates a higher resistance.
- HD SMT** = **HEAD SMUT** (*Sphacelotheca reiliana*).
This score indicates the percentage of plants not infected.
- KER KG** = **KERNELS PER KILOGRAM.**
The number of kernels per 1 kilogram of seed after discard is removed.
- KSZ DCD** = **KERNEL SIZE DISCARD.**
The percent of discard seed; calculated as the sum of discarded tip kernels and extra large kernels.
- MDM CPX** = **MAIZE DWARF MOSAIC COMPLEX** (MDMV = Maize Dwarf Mosaic Virus and MCDV = Maize Chlorotic Dwarf Virus).
A 1 to 9 visual rating indicating the resistance to Maize Dwarf Mosaic Complex.
A higher score indicates a higher resistance.
- MST** = **HARVEST MOISTURE.**
The moisture is the actual percentage moisture of the grain at harvest.
- NLF BLT** = **NORTHERN LEAF BLIGHT** (*Helminthosporium turcicum* or *Exserohilum turcicum*).
A 1 to 9 visual rating indicating the resistance to Northern Leaf Blight. A higher score indicates a higher resistance.
- PLT HT** = **PLANT HEIGHT.**
This is a measure of the height of the plant from the ground to the tip of the tassel in cm.
- POL SC** = **POLLEN SCORE.**
A 1 to 9 visual rating indicating the amount of pollen shed. The higher the score the more pollen shed.
- POL WT** = **POLLEN WEIGHT.**
This is calculated by dry weight of tassels collected as shedding commences minus dry weight from similar tassels harvested after shedding is complete.
- PRM** = **PREDICTED RELATIVE MATURITY.**
This trait, predicted relative maturity, is based on the harvest moisture of the grain. The relative maturity rating is based on a known set of checks and utilizes standard linear regression analyses and is also referred to as the Comparative Relative Maturity Rating System that is similar to the Minnesota Relative Maturity Rating System.
- PRM SHD** = **PREDICTED RELATIVE MATURITY GDU TO SHED.**
A relative measure of the growing degree units (GDU) required to reach 50% pollen shed. Relative values are predicted values from the linear regression of observed GDU's on relative maturity of commercial checks.
- RT LDG** = **ROOT LODGING.**
Root lodging is the percentage of plants that do not root lodge; plants that lean from the vertical axis at an approximately 30° angle or greater would be counted as root lodged.

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SCT GRN	=	SCATTER GRAIN. A 1 to 9 visual rating indicating the amount of scatter grain (lack of pollination or kernel abortion) on the ear. The higher the score the less scatter grain.
SDG VGR	=	SEEDLING VIGOR. This is the visual rating (1 to 9) of the amount of vegetative growth after emergence at the seedling stage (approximately five leaves). A higher score indicates better vigor.
SEL IND	=	SELECTION INDEX. The selection index gives a single measure of the hybrid's worth based on information for up to five traits. A maize breeder may utilize his or her own set of traits for the selection index. One of the traits that is almost always included is yield. When selection index data is presented, the tables represent the mean value averaged across testing stations.
SLF BLT	=	SOUTHERN LEAF BLIGHT (<i>Helminthosporium maydis</i> or <i>Bipolaris maydis</i>). A 1 to 9 visual rating indicating the resistance to Southern Leaf Blight. A higher score indicates a higher resistance.
SOU RST	=	SOUTHERN RUST (<i>Puccinia polysora</i>). A 1 to 9 visual rating indicating the resistance to Southern Rust. A higher score indicates a higher resistance.
STAGRN	=	STAYGREEN. Staygreen is the measure of plant health near the time of black layer formation (physiological maturity). A high score indicates better late-season plant health.
STK CNT	=	NUMBER OF PLANTS. This is the final stand or number of plants per plot.
STK LDG.	=	STALK LODGING. This is the percentage of plants that did not stalk lodge (stalk breakage) as measured by either natural lodging or pushing the stalks and determining the percentage of plants that break below the ear.
STW WLT	=	STEWART'S WILT (<i>Erwinia stewartii</i>). A 1 to 9 visual rating indicating the resistance to Stewart's Wilt. A higher score indicates a higher resistance.
TAS SZ	=	TASSEL SIZE. A 1 to 9 visual rating was used to indicate the relative size of the tassel. The higher the rating the larger the tassel.
TAS WT	=	TASSEL WEIGHT. This is the average weight of a tassel (grams) just prior to pollen shed.
TEX EAR	=	EAR TEXTURE. A 1 to 9 visual rating was used to indicate the relative hardness (smoothness of crown) of mature grain. A 1 would be very soft (extreme dent) while a 9 would be very hard (flinty or very smooth crown).
TILLER	=	TILLERS. A count of the number of tillers per plot that could possibly shed pollen was taken. Data are given as a percentage of tillers: number of tillers per plot divided by number of plants per plot.
TST WT	=	TEST WEIGHT (UNADJUSTED). The measure of the weight of the grain in pounds for a given volume (bushel).
YLD SC	=	YIELD SCORE. A 1 to 9 visual rating was used to give a relative rating for yield based on plot ear piles. The higher the rating the greater visual yield appearance.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U. S. C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) PIONEER HI-BRED INTERNATIONAL, INC.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME PH1B5
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 7301 NW 62nd AVENUE P.O.BOX 85 JOHNSTON, IA 50131-0085	5. TELEPHONE (include area code) 515-270-4051	6. FAX (include area code) 515-253-2125
	7. PVPO NUMBER 9800355	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO

If no, give name of country

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is(are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

Variety PH1B5 is owned by Pioneer Hi-Bred Int. Inc.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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